

Regional HIV/AIDS Epidemiologic Profile of Plymouth County, Massachusetts: 2012

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2011: Plymouth County, Massachusetts²

	N	%
People Living with HIV/AIDS	711	58%
People Reported with HIV or AIDS who are Deceased	519	42%
Total Number of People Reported with HIV Infection or AIDS	1,230	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 2. Average annual rate of HIV infection diagnosis from 2008 to 2010 and HIV/AIDS prevalence rate on 12/31/11¹: Plymouth County, Massachusetts²

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Plymouth County, MA	6.1	30.3
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate on 12/31/11	Rate per 100,000	Number of people living with HIV/AIDS
Plymouth County, MA	143.7	711
Massachusetts Total	277.5	18,170

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2001–2010, Plymouth County, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	494	17	52
2002	530	15	51
2003	545	20	35
2004	563	17	35
2005	584	17	36
2006	605	14	33
2007	624	12	31
2008	645	13	34
2009	668	9	32
2010	685	8	25

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 4. People diagnosed with HIV infection from 2008–2010¹ and people living with HIV/AIDS on December 31, 2011 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Plymouth County, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	54	59%	464	65%
Female	37	41%	247	35%
Place of Birth:	N	%	N	%
US	-- ⁷	-- ⁷	459	65%
Puerto Rico/US Dependency ³	-- ⁷	-- ⁷	36	5%
Non-US	44	48%	216	30%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	27	30%	322	45%
Black (non-Hispanic)	50	55%	280	39%
Hispanic/Latino	13	14%	98	14%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	26	29%	194	27%
Injection Drug Use (IDU)	-- ⁷	-- ⁷	131	18%
MSM/IDU	-- ⁷	-- ⁷	16	2%
Heterosexual Sex	20	22%	119	17%
Other	0	0%	26	4%
Total Undetermined	40	44%	225	32%
• Presumed Heterosexual Sex ⁴	17	19%	83	12%
• Undetermined ⁵	23	25%	142	20%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2011	
Under 13	-- ⁷	-- ⁷	2	<1%
13 to 19	-- ⁷	-- ⁷	6	1%
20 to 24	7	8%	16	2%
25 to 29	6	7%	21	3%
30 to 34	6	7%	37	5%
35 to 39	8	9%	43	6%
40 to 44	18	20%	91	13%
45 to 49	15	16%	123	17%
50 to 54	11	12%	156	22%
55 to 59	13	14%	120	17%
60+	3	3%	96	14%
Total⁶	91	100%	711	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Plymouth County, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	249	54%	73	30%
Black (non-Hispanic)	143	31%	137	55%
Hispanic/Latino	65	14%	33	13%
Total²	464	100%	247	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 6. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Plymouth County, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	194	42%	N/A	N/A
Injection drug use (IDU)	83	18%	48	19%
MSM/IDU	16	3%	N/A	N/A
Heterosexual sex	34	7%	85	34%
Other	16	3%	10	4%
Total Undetermined	121	26%	104	42%
• Presumed heterosexual sex ²	N/A	N/A	83	34%
• Undetermined ³	121	26%	21	9%
Total	464	100%	247	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Plymouth County, Massachusetts¹, 2001–2010²

	Male		Female		Total
	N	%	N	%	
2001	27	52%	25	48%	52
2002	39	76%	12	24%	51
2003	16	46%	19	54%	35
2004	21	60%	14	40%	35
2005	24	67%	12	33%	36
2006	18	55%	15	45%	33
2007	23	74%	8	26%	31
2008	21	62%	13	38%	34
2009	19	59%	13	41%	32
2010	14	56%	11	44%	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Plymouth County, Massachusetts¹, 2001–2010²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Asian/Pacific Islander		Total ³
	N	%	N	%	N	%	N	%	N
2001	21	40%	26	50%	5	10%	0	0%	52
2002	23	45%	16	31%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	51
2003	15	43%	17	49%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2004	18	51%	12	34%	5	14%	0	0%	35
2005	14	39%	16	44%	6	17%	0	0%	36
2006	12	36%	13	39%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	33
2007	11	35%	12	39%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	31
2008	10	29%	21	62%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	34
2009	9	28%	17	53%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	32
2010	8	32%	12	48%	5	20%	0	0%	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Plymouth County, Massachusetts¹, 2001–2010²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2001	28	54%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	52
2002	32	63%	5	10%	14	27%	51
2003	23	66%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2004	22	63%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	35
2005	20	56%	5	14%	11	31%	36
2006	20	61%	0	0%	13	39%	33
2007	11	35%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	31
2008	18	53%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	34
2009	14	44%	0	0%	18	56%	32
2010	12	48%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Plymouth County, Massachusetts¹, 2001–2010²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	7	13%	8	15%	-- ⁵	-- ⁵	10	19%	-- ⁵	-- ⁵	10	19%	15	29%	52
2002	16	31%	7	14%	-- ⁵	-- ⁵	6	12%	-- ⁵	-- ⁵	6	12%	15	29%	51
2003	9	26%	5	14%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	9	26%	6	17%	35
2004	11	31%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	7	20%	9	26%	35
2005	9	25%	5	14%	0	0%	5	14%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	12	33%	36
2006	11	33%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	8	24%	5	15%	33
2007	11	35%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	10	32%	31
2008	11	32%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	8	24%	0	0%	-- ⁵	-- ⁵	10	29%	34
2009	8	25%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	7	22%	0	0%	8	25%	7	22%	32
2010	7	28%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	5	20%	0	0%	6	24%	6	24%	25

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Plymouth County, Massachusetts¹, 2001–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2001	26	52	50%
2002	24	51	47%
2003	12	35	34%
2004	16	35	46%
2005	12	36	33%
2006	18	33	55%
2007	10	31	32%
2008	11	34	32%
2009	9	32	28%
2010	10	25	40%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Plymouth County, Massachusetts,¹ 2008–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	16	54	30%
Female	14	37	38%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	8	27	30%
Black (non-Hispanic)	16	50	32%
Hispanic/Latino	5	13	38%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	16	44	36%
Total	30	91	33%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12